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ABSTRACT

In 1989, Ohio's Kent State University (KSU) Office of Admissions and Records developed a list of 1,404 students who had transferred from Ohio's Cuyahoga Community College (CCC) to KSU between 1979 and 1989. Demographic, enrollment, academic performance, and graduation data were analyzed to determine the impact on transfer students of a proposed increase in the minimum acceptable KSU grade point average (GPA) from 2.00 to 2.50 or 2.75. Major findings of the study included the following: (1) nearly 85% of the KSU transfer students were white, and 12.4% were black, while at CCC, approximately 60% of the student population were members of minority groups; (2) the average age of the transfer students was 23, while the average age of CCC students was 29; (3) for transfer students, the average high school GPA was 2.46, and American College Testing math and verbal scores were at the 37th and 22nd percentiles compared to other KSU students; (4) 43.5% of the transfer students had graduated between 1979 and 1983, taking about 3.5 years to complete the degree program at KSU, a percentage slightly higher than the cumulative graduation rate of 41% for all other KSU students; (5) the mean GPA for the 451 students who graduated was 2.90, with black students averaging 2.45, black males averaging 2.21, and women performing better than men in all subgroups; (6) for the 428 transfer students who were currently enrolled, the mean GPA was 2.47, and for the 446 students who were not currently enrolled, the mean GPA was 1.99; and (7) raising the GPA standards to 2.50 would result in a 20% drop in the number of CCC transfer students who would graduate from KSU; and if the standard were raised to 2.75, a 40% drop would result, affecting black transfer students most by sharply reducing the number of graduates and placing more than 70% on probation. Extensive data tables and graphs are provided. (JMC)

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INCREASING ACADEMIC STANDARDS AND THEIR IMPACT UPON MINORITY TRANSFER STUDENTS FROM COMMUNITY COLLEGES: A CASE STUDY

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Increasing Academic Standards and Their Impact Upon Minority Transfer Students from Community Colleges -- Research in Action.

Recent studies of community college students who have transferred to major four year colleges to complete their baccalaureate degrees have indicated that about 40% of that group ultimately complete their degree programs in about 3.5 years after transfer. This compares favorably to a similar graduation rate for "native" students who have remained at the four year college for their entire bachelor's degree program. In most of these studies a GPA of 2.0 has been the standard for satisfactory academic performance and for graduation.

In recent years, however, there has been a marked increase in many colleges and universities in the GPA required for continued satisfactory standing and graduation. Little attention has been paid to the effect this increase is likely to have upon transfer students from community colleges, particularly minority students.

As part of a larger study of 1404 community college students who transferred to Kent State University in the ten year period, 1979-89, this study focused upon the impact of a projected increase in GPA to 2.50 and 2.75 and its effect upon academic performance and graduation rate. The results described below have serious consequences for transfer students as a whole, and for minority students in particular.

Cuyahoga Community College (CCC) is a large metropolitan institution with three campuses serving more than 25,000 students in northeast Ohio. The average age of students is 29. About 60% of the total enrollment are Black, Hispanic or Asian minorities. Within 30 minutes driving time from CCC there are 3 large universities (2 state and 1 private) and four smaller private liberal arts colleges.

This study was part of a larger analysis of the records of 1404 students who have transferred from Cuyahoga Community College (CCC) to Kent State University (KSU) over a ten year period, 1979-1988. Basic data were obtained in reports from the KSU Office of Admission and Records and from the Office of Academic Assessment and Evaluation Services. Some of the key findings are:

•**Demographic Data.** Nearly 85% of the CCC transfer students were Caucasians, 12.4% were Black, and there were very small percentages of Hispanic, Asian and International students. The average age was 23, though the range extended from 18-70. Their average high school GPA was 2.46 and ACT scores for math and verbal ability were at the 37th and 22nd percentiles compared to other KSU students. The largest number of students come from ten high schools located in the western suburbs of Cuyahoga County.

•**Persistence.** Of the 1404 CCC transfer students, 43.5% graduated in the period 1979-1983, taking about 3.5 years to complete the degree program at KSU. This is slightly better than the cumulative graduation rate of all other KSU students, 41% of whom have graduated within six years.

•**Success.**The academic performance or "success" of the transfer students presents a very mixed record. The mean GPA for the 451 students who graduated was 2.90 or a B-grade performance. Women performed somewhat higher than men. Black students averaged 2.45 with Black men averaging only 2.21.

•For the 428 currently enrolled students the mean GPA is 2.47 with lower scores for minorities.

•For the 446 students not currently enrolled, the mean GPA was 1.99 but with a much lower GPA of 1.60 for Blacks. Males in all subgroups did poorer than females.

•**Increasing Academic Standards.** Over the past several years, the four professional colleges at Kent State University, Education, Business, Nursing, and Fine & Professional Arts, have raised their academic standards by increasing the required GPA for graduation to 2.50. Only the College of Arts and Sciences has maintained a 2.0 GPA as a standard of satisfactory performance and for graduation. The College of Education is currently considering increasing the minimum GPA to 2.75 so that all graduates will be admissable to Graduate School.

Raising the GPA standards to 2.50, and possibly to 2.75, would have serious consequences for CCC transfer students. It would result in a 20% drop in the number who would graduate if the GPA were raised to 2.50, and a 40% drop if the standard were raised to 2.75. It would have profound effects on Black students in sharply reducing the number of graduates and placing more than 70% on probation.

The Colleges of Education, Business and Nursing would have the highest percentage of students who would graduate under these increased standards, although the actual numbers would be small. The bulk of CCC transfer students would remain in, or be forced to transfer to, the College of Arts and Sciences where the required GPA has remained consistently at 2.0 since the 1970s. The net effect of such increases in GPA standards would be to eliminate transfer students, particularly minority students from professional degree programs.

•**Implications for Action.** Future community college transfer students who have been admitted to the new dual admissions program and a newly developed Ford Foundation teacher education program must be well selected and their progress carefully monitored. Transfer students who attain GPAs of 2.90 or better are most likely to graduate. Higher GPA standards (minimum of 2.50) in the Colleges of Education, Business, Nursing and Fine & Professional Arts will limit these programs to only the very best of transfer students. Based on past performance, minority students are more likely to have GPAs of less than 2.50, to be placed on academic probation, and are more likely to drop out and not complete their studies.

Given these projections, it seems clear that colleges must develop programs that will provide careful and sustained advising, both academic and personal, financial aid counseling, and a network of support services if we are to retain these students and increase the likelihood that they will graduate in a reasonable time period.

Further Research. Follow-up studies will (a) make comparisons with a native group of KSU students, (b) provide qualitative data from interviews of 100 transfer students from this sample, (c) examine the phenomenon of "reverse transfer" from KSU to CCC, and (d) begin to make comparable studies using similar methodologies for students who transfer from KSU's seven regional campuses to complete their studies on the Kent campus.

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More recently, legislation enacted by the Ohio General Assembly has now made it mandatory that courses taken at a community college be accepted for transfer credit at all four year state colleges and universities.

These developments have given a special urgency to ask: what do we know about those students who have transferred from community colleges to Kent State University?

The Sample. In Fall, 1989, the KSU Office of Admissions and Records made a computer search of its student data base and developed a list of 1404 students who had transferred from CCC to KSU during the ten year period from Fall 1979 through Spring 1989. A comprehensive descriptive analysis was also produced using a number of the variables (fields) already contained in the data base. These fields included:

Student Number	Name	Enrolled [Matriculated]
High School Code	H.S. Rank	H.S. Percentile
HS GPA	ACT Composite	ACT English
ACT Math	ACT Soc. Sci	ACT Nat. Sci.
SAT Combined	SAT Math	SAT Verbal
KSU Major	KSU GPA	Admission Condition
Sex	Ethnic Group	Sem. Last Attended
Admission Date	Age	Total Sem. Attended
Hours Toward Degree	Degree Granted	Sem. Graduated
Transfer College	Transfer Branch	Transfer Hours
Rank	College	

Lastly, a student flow study was produced for each of the 1404 individual students which provided a summary record of date admitted, GPA, major field, and the consecutive semesters enrolled. These reports formed the basis for this study.

This study is organized in three parts: (a) the demographic background of the CCC transfer students, (b) the enrollment and graduation data (persistence) of the group, and (c) the academic performance (success) of the group. The data are analyzed first for the group as a whole, and then by sub-groups based on race/ethnicity and gender. The study calls attention to the implications of high risk for this group in noting that GPA standards in four of the university's six colleges/schools have recently been raised to 2.50, 3 and the College of Education is now considering a minimum GPA of 2.75 for its graduates.

Demographic Background

Who are these transfer students, what is their background, and where have they come from? Tables 2,3, and 4 present demographic data about CCC Transfer students separated by race/ethnic group and by gender.

Race and Gender. Table 2 provides an analysis of the number and percentage of CCC transfer students by race/ethnic group and by gender. The 1404 students in the sample were divided almost equally between males and females. There were 665 males (47.37%) and 739 females (52.63%). The group was overwhelmingly Caucasian, with a total of 1192 white students constituting 84.9% of the entire sample. There were only 174 Black students (12.39%) and very small numbers of Asian, Hispanic and International students (see graph, Fig. 5).

Age, GPA and ACT Scores. Table 3 presents data on the mean age of the CCC transfer students and various academic predictor data such as high school GPA, KSU GPA and ACT and SAT scores.

Age. The average age of the CCC transfer students was 23.1, although there was an extremely wide range from 18 to 70 years old. Males tended to be slightly younger (22.6 years) while women were slightly older (23.5 years).

GPA. While the data are limited (n=86), it appears that CCC Transfer students had somewhat above average academic grades in high school. The mean GPA was 2.46 or C+ grades. They maintained a similar academic standard at KSU, attaining a mean GPA of 2.46, although there was a very wide range of 0.16 to 4.00 among the 1325 students for whom data were available.

ACT and SAT Scores. ACT and SAT scores are regularly used in admission to Ohio colleges and universities as predictors of academic achievement. However, because of the open admissions policy of CCC and the KSU admissions policies for older students with advanced college credits, only 235 CCC transfer students presented ACT scores and only 60 of the 1404 in the sample had SAT scores available. The mean ACT scores were 15 for math and 16 for English which are equivalent to the 37th and 22nd percentiles respectively on the norms used at KSU for entering students. Mean SAT scores

were 440 for math and 423 for verbal ability which are equivalent to the 35th and 20th percentiles respectively on the norms used by KSU for admitting students. It should be noted, too, that there were very wide ranges of scores on both of these measures.

Feeder High Schools. While individual students come from a wide array of high schools throughout northeast Ohio, the largest groups come from ten high schools in the western suburbs of metropolitan Cleveland. As shown in Table 7, four high schools in Parma alone (Padua Franciscan, Parma, Normandy and Valley Forge) account for 207 or 16.4% of the total of 1404 transfer students. Kennedy High School is the only school in the city of Cleveland that had more than twenty graduates participate as CCC-KSU transfer students. Clearly, the majority of transfer students in this group come from the western suburbs and probably attended the Western Campus of CCC located in Parma.

Enrollment and Graduation Data (Persistence)

Table 1 provides summary data on the number and percent of CCC students who transferred each year to KSU, actually matriculated, graduated, were currently enrolled, or who were no longer currently enrolled. The data indicate a gradual decline in the number of students who transferred from 193 in 1979 to 158 in 1988 (see graph, Fig. 1). However, only about 80% of those who transferred actually matriculated and enrolled for credit (see graph, Fig. 2).

Transfers were made at varying points in the students' academic programs. Data from the descriptive analysis indicated that some CCC students matriculated with as little as 0.66 credits and others as much as 152 transfer credits for courses taken at CCC. The median number of credits accepted for transfer was 34. The data base does not record whether transfer students had received the Associate Degree from CCC prior to transferring to KSU. Some inference might be made by noting that 260 transfer students (19%) had 62 or more semester credits (96 quarter credits at CCC) which is the minimum number needed for the associate degree.

Graduation. The ability of a student to remain enrolled and complete a degree program is frequently referred to as "persistence" in the literature. The number of CCC transfer students who graduated from KSU and received bachelors degrees between 1979-1989 is also shown on Table 1. The number declines gradually from

71 in 1979 to 66 in 1983 with an average graduation rate of 43.46% (see graph Fig. 3). From 1984 through 1988 the number who graduate declines sharply from 51 to 0, while the number and percent currently enrolled rises sharply from 30 in 1984 to 132 in 1988, indicating that these students are still enrolled and pursuing their degree programs. Table 1 also shows that a handful of students who transferred between 1979-1983 are still enrolled.

Overall, the graduation rate of the CCC students is consistently higher than the all-university rate. A comparison is shown below based on data drawn from Tables 1 and 1A.

Graduation Rates

Year Entered	CCC Transfers	All-University
1979	43.8%	42.0%
1980	39.0	39.6
1981	45.0	38.6
1982	44.6	39.1
1983	44.9	37.0
1984	37.0	14.2
1985	30.8	0.2

Time to Complete. Data on the length of time needed to complete degree programs is shown in Table 1B. On average, it took CCC Transfer students 7 semesters or 3.5 years to graduate from KSU. The range extended from a minimum of 2 semesters (1 year) to as many as 14 semesters (7 years) . Put another way, it took the average CCC transfer nearly 6 years to achieve the bachelor's degree. This is quite comparable to all-university data for 1980-1988 which are show below in cumulative percentages.

KSU Graduation Rate - Years to Complete*

	4 yrs	5 yrs	6 yrs
All Students	23%	37%	41%
Minority Students	4	14	23

[*Data from KSU Office of Academic Assessment and Evaluation Services]

Attrition. A large number of transfer students, ranging from 88 in 1979 to 72 in 1983, have not enrolled for the past five semesters (see graph, Fig. 4). While KSU makes no official

determination when a student has dropped out, the authors determined that a continuous absence of five semesters was a reasonable figure to use as a measure of no intention to return. This represent an average attrition factor of 52%. Later years from 1984 through 1988 indicate a rapidly declining attrition rate from 41.3% to 11.3%, indicating that most of the transfer students are still enrolled.

KSU records give no data about why students have not continued in enrollment, although low academic achievement, financial hardship, employment needs and family pressures are likely causes of this attrition. In order to help improve transfer students' opportunities for greater success it seems that data such as Dean's official letters of warning, probation or dismissal, exit interviews, advisor's counseling reports, need for financial aid, and regular, systematic surveys of former students ought to be gathered and analyzed to provide empirical data to assess the causes of this high attrition among CCC transfer students.

Academic Performance (Success)

A basic measure of the academic performance of CCC transfer students is their GPA. In the literature this is often referred to as the "success" factor. Table 4 presents GPA data for CCC transfer students arrayed by enrollment status, by race/ethnic group, and by gender. Table 5 presents similar data except that the data are arrayed by college and gender. Data from the two tables will be considered together according to enrollment status.

Degree Graduates. The mean GPA for 451 students who graduated and received a bachelors degree was 2.90, about a B-grade performance. There are wide differences, however, among racial/ethnic groups (see graph, Fig. 6). Caucasian students who graduated had an average GPA of 2.95, with women doing slightly better (3.03) than men (2.85). Black male graduates had an average GPA of 2.21 while Black women graduates had a mean GPA of 2.70. The GPAs for Asian, Hispanic and International graduates are all well above 2.0, but the subgroup sizes are so small as to suggest caution in interpreting the data.

Degree Graduates by College. Table 5 presents on data on GPA by college for those who completed degrees. Using combined totals the data indicate that there are only relatively small differences in the GPA of graduates from the various colleges. Most students

graduated with slightly better than 3.0 or B average, although somewhat less, 2.80 or B-, in the College of Fine and Professional Arts. Typically, females scored less than a tenth of a point higher than males, although males outscored females by .18 point in the School of Nursing. In short, the CCC Transfer students who persisted and graduated did reasonably well overall.

College	GPA of Graduates	N
Education	3.15	16
Nursing	3.03	36
Business	2.98	44
Phys Ed, Rec. &Dance	3.01	4
Arts & Science	2.80	55
Fine & Prof. Arts	2.80	61

Currently Enrolled Students. The data shown in Table 4 for currently enrolled CCC transfer students is less sanguine than for graduates. The combined mean GPA is only 2.47 for 428 students. This GPA would put all of these students on academic probation in the College of Education. There are also substantial differences when scores are arranged by race and gender (see graph, Fig. 7). The GPA for Caucasian males (2.45) is below the College minimum, though females have a somewhat higher mean GPA of 2.61. The GPAs for Black students range from 2.10 to 2.20. While these would be acceptable in the College of Arts and Sciences, these same students would be placed on academic probation in the College of Education and would be subject to dismissal if there were no substantial improvement. GPAs for Asian, Hispanic and International students are also low, though the small subgroup size makes caution essential in interpreting these few scores.

Currently Enrolled Students by College. Table 5 presents GPA data on CCC transfer students who are currently enrolled arrayed by college. The difference in GPA between the colleges is relatively small, 0.54 points, with Education highest and Arts and Science lowest.

College	GPA Students Enrolled	N
Education	2.77	49
Business	2.70	64
Nursing	2.64	11
Fine & Prof. Arts	2.57	119
Phys Ed, Rec. &Dance	2.49	6
Arts & Sciences	2.23	179

Students Not Currently Enrolled. The mean GPA for 446 CCC transfer students not enrolled is 1.99. The GPA is far below the level for satisfactory performance in the College of Education, although just shy of being satisfactory in the College of Arts and Science. The figures reflect even poorer performance when arrayed by race and gender as shown in Table 4 and in the graph, Fig. 8. Caucasian males had a GPA of only 1.85 though Caucasian females earned a mean 2.28. Black males, however, scored only 1.50 and Black females had a GPA of 1.70. GPAs for Hispanic and International students are also marginal though the subgroup size is very small. From these low GPAs we can safely infer that poor academic performance is at least one reasons why 446 of the total of 1404 CCC transfer students are not currently enrolled.

Students Not Currently Enrolled by College. As shown in Table 5, there are major differences among the CCC transfer students when combined GPA data for students not currently enrolled are arrayed by college. The combined data presented below, however, are somewhat misleading since in four of the six colleges, females have done substantially better than male students. Male students in the Colleges of Arts and Sciences and Education, and women in Nursing would all be subject to academic dismissal. The small Ns in P.E.R.D. and Nursing suggest caution in interpreting those scores.

College	GPA For Students Not Currently Enrolled	N
Phys Ed, Rec. &Dance	3.21	1
Business	2.68	12
Fine & Prof. Arts	2.34	32
Education	2.02	10
Arts & Sciences	1.82	92
Nursing	1.76	8

All CCC Transfer Students Combined. The combined mean GPA for 1325 CCC transfer students is 2.46 (see graph, Fig. 9). This is somewhat less than a C+ grade average and would warrant academic probation in the College of Education, although it would be satisfactory performance in the College of Arts and Science. When separated by race/ethnic group, however, substantial differences become evident. The mean GPA for all Caucasian CCC transfer students was 2.53, but all minority groups did poorer. The combined mean GPA for 160 Black students was only 1.95, less than marginal performance that would have warranted academic probation in all colleges of the university.

In summary, the 451 CCC transfer students who succeeded in their programs and earned baccalaureate degrees achieved mean GPAs of 2.90, or a B- grade level performance. Those 428 who are still enrolled evidence substantially lower performance with a mean GPA of 2.47, with minority groups performing even lower. The 446 students not currently enrolled are in serious academic difficulty with a combined mean GPA of 1.99; minority group GPAs are even lower. Only Caucasian women performed better; their mean GPA was 2.28.

The likelihood of academic success for the 428 CCC transfer students still enrolled is diminishing rapidly as various colleges of the university increase their GPA requirements to 2.50 or more for continued satisfactory performance and for graduation.

For the 446 CCC transfer students not currently enrolled (32% of the original sample of 1404), there seems to be very little likelihood that they will achieve academic success and persist until graduation.

This is especially true for Black men and women whose GPAs are 1.50 and 1.70 respectively.

Impact of Increased GPA Standards

While the data presented in this report represents a ten year history from 1979-1988, changes in academic standards have taken place in the last several years in four of the university's six colleges -- Education, Business, Nursing and Fine & Professional Arts. Each of these has raised its minimum GPA to 2.50 and the College of Education is now considering raising its standard to 2.75. The GPA in the School of Physical Education, Recreation & Dance, and the College of Arts and Sciences (where most of the transfer students have enrolled) still remains at 2.00. This increase in GPA standards has serious implications of CCC transfer students, especially for those enrolled in the four professional schools.

The comparatively low 2.21 GPA for Black male graduates should raise serious concerns for KSU administrators who are currently seeking to enroll Black males in teacher education programs. At present, all students enrolled in the professional programs of the College of Education must maintain a minimum GPA of 2.50 throughout their final two years and have a 2.50 GPA in order to graduate. Under present policies, 12 of these 15 Black male graduates with a 2.21 GPA would not have been admitted to advanced standing and would not have been eligible to graduate from the College of Education. The ability to maintain a 2.50 GPA is now a critical factor for students seeking to transfer to the College of Education.

Administrators and faculty should also be aware of proposals recently introduced into the College of Education's undergraduate curriculum council that would raise the required GPA from 2.50 to 2.75. Those advocating such a plan have argued that graduates of teacher education programs must have high enough GPAs that would qualify them to meet the minimum GPA of 2.75 for admission to Graduate School for further professional education.

The impact of these raised GPA standards is shown in Tables 4A and 5A. Here the GPA is separated into categories of <2.50, >2.50 and >2.75. It is encouraging to note in Table 4A that when ethnicity and gender are combined, 79.2% of those who graduated under previous standards would still graduate if the GPA were raised to 2.50, and

60.5% would graduate if the GPA were raised to 2.75. But these combined figures mask the fact that 80% of the Black men and 20% of the Black women would not graduate because their GPAs were less than the minimum 2.50. Among all those currently enrolled, 50% have GPAs <2.50, and 71.5% of all those not enrolled do not meet the minimum 2.50. The percentages for Blacks in these categories are even higher.

When the data are reorganized by college, the College of Education ranks first with the highest percentages of graduates in the raised GPA categories. Nearly 94% would graduate at the 2.50 standard, and 87.5% would graduate at the 2.75 standard. The colleges of Business and Nursing also have high percentages of transfer students who would graduate under the increased standards. The most serious problems would be in the College of Arts and Sciences where very high percentages of students have GPAs less than 2.50, especially among those currently enrolled (62.5%), and those not now enrolled (82.4%)

Under these conditions of increased GPA standards, many of the currently enrolled CCC Transfer students would be on academic probation and a large proportion of minority students would be subject to possible dismissal because of excessively low GPAs that could not be raised to the required 2.50 or 2.75 within a reasonable time. Should the GPA be raised to 2.75, administrators and faculty must ensure that developmental programs, support systems, counseling, and frequent monitoring of students progress are in place and used regularly, especially for minority students.

IMPLICATIONS FOR THE FUTURE

Times and circumstances have changed greatly in the decade since 1979. KSU has established more rigorous standards for admission, especially for applicants with high school deficiencies. New requirements have been established for the distribution of liberal education courses. And some professional programs, including teacher education, have been lengthened by additional requirements imposed by external accrediting agencies or the state legislature.

In addition, the four professional colleges of Education, Business, Nursing and Fine & Professional Arts have recently raised their minimum GPA to 2.50 which suggests that students whose academic

progress was considered acceptable in the past decade, will now be performing marginally and will frequently be on academic probation or subject to dismissal. Thus, only the most capable students will be able to transfer into one of the professional programs and expect to graduate. This raises serious implications for minority students whose past history of academic progress as CCC transfer students was substantially below the newly raised 2.50 minimum GPA.

Extrapolating these general implications to CCC transfer students, it seems very clear that future students admitted to the new dual admissions program and the Ford Foundation teacher education program must be well selected and their progress carefully monitored. In addition, there must also be developed programs that will provide careful advising, both academic and personal, financial aid counseling, and a network of support services if we are to retain these students. Transfer students who attain GPAs of 2.90 or better are most likely to graduate. Higher GPA standards (minimum of 2.50) in the Colleges of Education, Business, Nursing and Fine & Professional Arts will limit these programs to only the very best of transfer students. Based on past performance, minority students will take longer to complete their degrees, are more likely to be placed on academic probation, and are more likely to drop out and not complete their studies.

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Table 1

Numbers and Percentages of Tri-C Transfer Students Who Transferred, Matriculated, Graduated, Who Are Currently Enrolled and Who are Not Currently Enrolled Each Year

Enrollment Year	Number Transferred	Total Number of Matriculated		Number of Degrees Received[a]		Number Currently Enrolled[b]		Number Not Currently Enrolled[c]	
	N	N	%	N	%	N	%	N	%
1979	193	162	83.9	71	43.8	3	1.9	88	54.3
1980	188	159	84.6	62	39.0	8	5.0	89	56.0
1981	190	149	78.4	67	45.0	9	6.0	73	49.0
1982	194	148	76.3	66	44.6	6	4.1	76	51.4
1983	175	147	84.0	66	44.9	9	6.1	72	49.0
1984	166	138	83.1	51	37.0	30	21.7	57	41.3
1985	146	120	82.2	37	30.8	43	35.8	40	33.3
1986	170	133	78.2	29	21.8	89	66.9	15	11.3
1987	144	116	80.6	7	6.0	109	94.0	.	.
1988	158	132	83.5	0	.	132	100.0	.	.

a The percentage is calculated by dividing degree received by total matriculated.

b Those students who have taken courses in the last 5 semesters (Spring 1987 to Spring 1989).

c Those students who have not taken courses in the last 5 semesters (Spring 1987 to Spring 1989).

Table 1a

Number and Percent Graduated for CCC-Transfers and for All University First Time Entering Freshmen by Year*

Year	CCC Transfers N	CCC Transfers %	All University N	All University %
1979	71	43.8	1106	42.0
1980	62	39.0	1285	39.6
1981	67	45.0	1346	38.6
1982	66	44.6	1309	39.1
1983	66	44.9	1070	37.0
1984	51	37.0	460	14.2
1985	37	30.8	6	0.2
1986	29	21.8	0	0
1987	7	6.0	0	0
1988	0	0	0	0

*Information obtained from Office of Academic Assessment and Evaluation Services.

Table 1b

Total Number of Semesters at KSU Attended by Tri-C Transfers by Enrollment Status, Race/Ethnicity and Gender

Race/Ethnicity	Enrollment Status: Degree Male	Degree Female	Enrolled Male	Enrolled Female	Not Enrolled Male	Not Enrolled Female
Asian						
$\bar{X}$	6	11	7	.	.	.
Min	4	10	6	.	.	.
Max	8	12	8	.	.	.
N	3	3	3	.	.	.
Black						
$\bar{X}$	8	6	5	4	3	3
Min	2	4	1	1	1	1
Max	12	10	10	10	9	10
N	15	15	20	32	40	52
Caucasian						
$\bar{X}$	7	7	4	4	3	2
Min	3	2	1	1	1	1
Max	14	12	12	16	10	9
N	199	212	178	196	186	221
Hispanic						
$\bar{X}$	12	8	3	4	1	1
Min	12	8	2	4	1	1
Max	12	8	4	4	2	1
N	1	1	3	1	4	1
International						
$\bar{X}$	6	6	4	4	1	4
Min	4	6	2	2	1	1
Max	8	6	6	5	2	7
N	6	1	3	2	4	2
Race/Ethnicity Combined						
$\bar{X}$	7	7	4	4	3	3
Min	2	2	1	1	1	1
Max	14	12	12	16	10	10
N	224	232	207	231	234	276

Table 2

Number and Percentages by Race/Ethnic Group and Gender of Tri-C Transfer Students

Gender	Asian	Black	Caucasian	Hispanic	International	Total
Male						
N	6	75	563	8	13	665
% of total	0.43	5.34	40.10	0.57	0.93	47.37
Female						
N	3	99	629	3	5	739
% of total	0.21	7.05	44.80	0.21	0.36	52.63
Total						
N	9	174	1192	11	18	1404
% of total	0.64	12.39	84.90	0.78	1.29	100

Table 3

Mean Age, High School GPA, KSU GPA, ACT and SAT of Tri-C Transfer Students

	Age								
	Male	Female	Combined	H.S. GPA	KSU. GPA	ACT (Math)	ACT (Eng)	SAT (Math)	SAT (Verb)
X	22.6	23.5	23.1	2.46	2.46	15	16	440	423
SD	4.1	6.0	5.2	.60	.79	7	5	101	101
Minimum	18	18	18	1.34	.16	1	2	260	200
Maximum	51	70	70	3.90	4.00	35	31	650	730
N	665	739	1404	86	1325	235	235	60	60

Table 4

KSU GPA of Tri-C Transfer Students by Race/Ethnicity, Gender and Enrollment Status

	Enrollment Status						
	Degree		Enrolled		Not Enrolled		Total # of
Race/Ethnicity	Male	Female	Male	Female	Male	Female	students
Asian							
$\bar{X}$	2.47	2.34	1.89	.	.	.	2.23
SD	.42	.24	.08	.	.	.	.36
N	3	3	3	.	.	.	9
Black							
$\bar{X}$	2.21	2.70	2.10	2.20	1.50	1.70	1.95
SD	.29	.34	.69	.52	.48	.72	.67
N	15	15	20	32	32	46	160
Caucasian							
$\bar{X}$	2.85	3.03	2.45	2.61	1.85	2.28	2.53
SD	.45	.49	.70	.78	.80	.81	.78
N	197	209	175	189	172	191	1133
Hispanic							
$\bar{X}$	3.84	3.02	1.95	2.32	1.91	.	2.31
SD	.	.	.57	.	.73	.	.82
N	1	1	3	1	3	0	9
International							
$\bar{X}$	2.74	2.43	2.15	2.20	2.05	1.89	2.40
SD	.63	.	.43	.21	.	.	.54
N	6	1	3	2	1	1	14
Male & Female Combined							
$\bar{X}$	2.90		2.47		1.99		2.46
SD	.49		.73		.81		.79
N	451		428		446		1325

Table 4a

Number and Percents of Tri-C Transfer Students Who Have GPA of 2.50 and Higher and 2.75 and Higher by Enrollment Status, Ethnicity, and Gender

	Enrollment Status													
	Degree				Enrolled				Not Enrolled					
Ethnicity	Male		Female		Male		Female		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Asian														
<2.50	1	33.3	2	66.7	3	100	.	.	.	.	.	.	6	66.7
>2.50	2	66.7	1	33.3	.	.	.	.	.	.	.	.	3	33.3
>2.75	1	33.3	.	.	.	.	.	.	.	.	.	.	1	11.1
Black														
<2.50	12	80	3	20	13	65	24	75	32	100	39	84.8	123	76.9
>2.50	3	20	12	80	7	35	8	25	.	.	7	15.2	37	23.1
>2.75	.	.	6	40	3	15	4	12.5	.	.	4	8.7	17	10.6
Caucasian														
<2.50	46	23.3	27	12.9	84	48	81	42.9	136	79.1	108	56.5	482	42.5
>2.50	151	76.6	182	87.1	91	52	108	57.1	36	20.9	83	43.5	651	57.5
>2.75	110	55.8	150	71.8	64	36.6	84	44.4	25	14.5	57	29.8	490	43.2
Hispanic														
<2.50	.	.	.	.	3	100	1	100	2	66.7	.	.	6	66.7
>2.50	1	100	1	100	.	.	.	.	1	33.3	.	.	3	33.3
>2.75	1	100	1	100	.	.	.	.	.	.	.	.	2	22.2
International														
<2.50	2	33.3	1	100	3	100	2	100	1	100	1	100	10	71.4
>2.50	4	66.7	.	.	.	.	.	.	.	.	.	.	4	28.6
>2.75	4	66.7	.	.	.	.	.	.	.	.	.	.	4	28.6
Ethnicity Combined														
<2.50	61	27.5	33	14.4	106	52	108	48.2	171	82.2	148	62.2	627	47.3
>2.50	161	72.5	196	85.6	98	48	116	51.8	37	17.8	90	37.8	698	52.7
>2.75	116	52.3	157	68.6	67	32.8	88	39.3	25	12	61	25.6	514	38.8
Ethnicity and Gender Combined														
	N	%			N	%			N	%			N	%
<2.50	94	20.8			214	50			319	71.5			627	47.3
>2.50	357	79.2			214	50			127	28.5			698	52.7
>2.75	273	60.5			155	36.2			86	19.3			514	38.8

Table 5

KSU GPA of Tri-C Transfer Students by College, Gender and Enrollment Status

College	Enrollment Status: Degree Male	Degree Female	Enrolled Male	Enrolled Female	Not Enrolled Male	Not Enrolled Female	Total
Arts & Sciences							
$\bar{X}$	2.86	3.12	2.20	2.26	1.70	1.95	2.35
SD	.54	.53	.71	.78	.74	.76	.68
N	35	20	96	83	49	43	326
Business							
$\bar{X}$	2.93	3.15	2.53	2.87	2.34	2.93	2.79
SD	.40	.37	.67	.74	.77	.76	.62
N	34	10	31	33	5	7	120
Education							
$\bar{X}$	3.12	3.15	2.70	2.80	1.57	2.32	2.61
SD	.25	.50	.60	.72	.70	.65	.57
N	2	14	15	34	4	6	75
Fine & Prof. Arts							
$\bar{X}$	2.76	2.84	2.55	2.60	1.96	2.51	2.54
SD	.49	.40	.63	.64	.81	.80	.63
N	29	32	59	60	10	22	212
Nursing							
$\bar{X}$	3.18	3.00	2.95	2.61	.	1.76	2.70
SD	.26	.45	.	.47	.	.72	.48
N	6	30	1	10	.	8	55
P.E.R.D							
$\bar{X}$	.	3.01	2.34	2.65	3.21	.	2.80
SD	.	.53	1.50	1.01	.	.	1.01
N	.	4	2	4	1	.	11

Table 5a

Number and Percents of Tri-C Transfer Students Who Have GPA of 2.50 and Higher and 2.75 and Higher by Enrollment Status, Gender, and College

Ethnicity	Enrollment Status: Degree				Enrolled				Not Enrolled				Total	
	Male		Female		Male		Female		Male		Female			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Arts & Sciences														
<2.50	16	45.7	3	15	61	63.5	51	61.4	42	85.7	34	79.1	207	63.5
2.50	19	54.3	17	85	35	36.5	32	38.6	7	14.3	9	20.9	119	36.5
2.75	15	42.9	16	80	19	19.8	21	25.3	6	12.2	7	16.3	84	25.8
Business														
<2.50	6	17.6	1	10	12	38.7	12	36.4	3	60	2	28.6	36	30
2.50	28	82.4	9	90	19	61.3	21	63.6	2	40	5	71.4	84	70
2.75	23	67.6	9	90	14	45.2	18	54.5	2	40	4	57.1	70	58.3
Education														
<2.50	0	0	1	7.1	5	33.3	10	29.4	4	100	3	50	23	30.7
2.50	2	100	13	92.9	10	67.7	24	70.6	.	.	3	50	52	69.3
2.75	2	100	12	85.7	8	53.3	19	55.9	.	.	2	33.3	43	57.3
Fine & Professional Arts														
<2.50	8	27.6	5	15.6	27	45.8	27	45	8	80	9	40.9	84	39.6
2.50	21	72.4	27	84.4	32	54.2	33	55	2	20	13	59.1	128	60.4
2.75	11	37.9	18	56.3	24	40.7	25	41.7	1	10	11	50	90	42.5
Nursing														
<2.50	.	.	3	10	.	.	6	60	.	.	6	75	15	27.3
2.50	6	.	27	90	1	100	4	40	.	.	2	25	40	72.7
2.75	6	100	20	66.7	1	100	3	30	.	.	1	12.5	31	56.4
P.E.R.D.														
<2.50	.	.	1	25	1	50	2	50	.	.	.	.	4	36.4
2.50	.	.	3	75	1	50	2	50	1	100	.	.	7	63.6
2.75	.	.	3	75	1	50	2	50	1	100	.	.	7	63.6

Table 6

KSU GPA of Tri-C Transfer Students by Enrollment Status and Gender

	Enrollment Status		
Gender	Degree	Enrolled	Not Enrolled
Male			
$\bar{X}$	2.81	2.39	1.80
SD	.48	.70	.77
N	222	204	208
Female			
$\bar{X}$	3.00	2.54	2.16
SD	.49	.75	.82
N	229	224	238
Combined			
X	2.90	2.47	1.99
SD	.49	.73	.81
N	451	428	446

Table 7

Number of Students from Feeder High Schools Sending 20 or More Students to Tri-C

Number of Students	Name of High School
21	Orange
23	Norht Royalton
24	Padua Franciscan
25	Charles F. Brush John F. Kennedy Garfield Heights
26	Solon
27	Cleveland Heights Lakewood
28	Strongsville Senior
29	Shaker Heights
30	Bedford Senior
34	Brecksville Senior
35	Brunswick
36	Bered
40	Midpark
45	North Olmstead
55	Parma
71	Normandy
81	Valley Forge

Figure 1
Number of Transfers 79-88

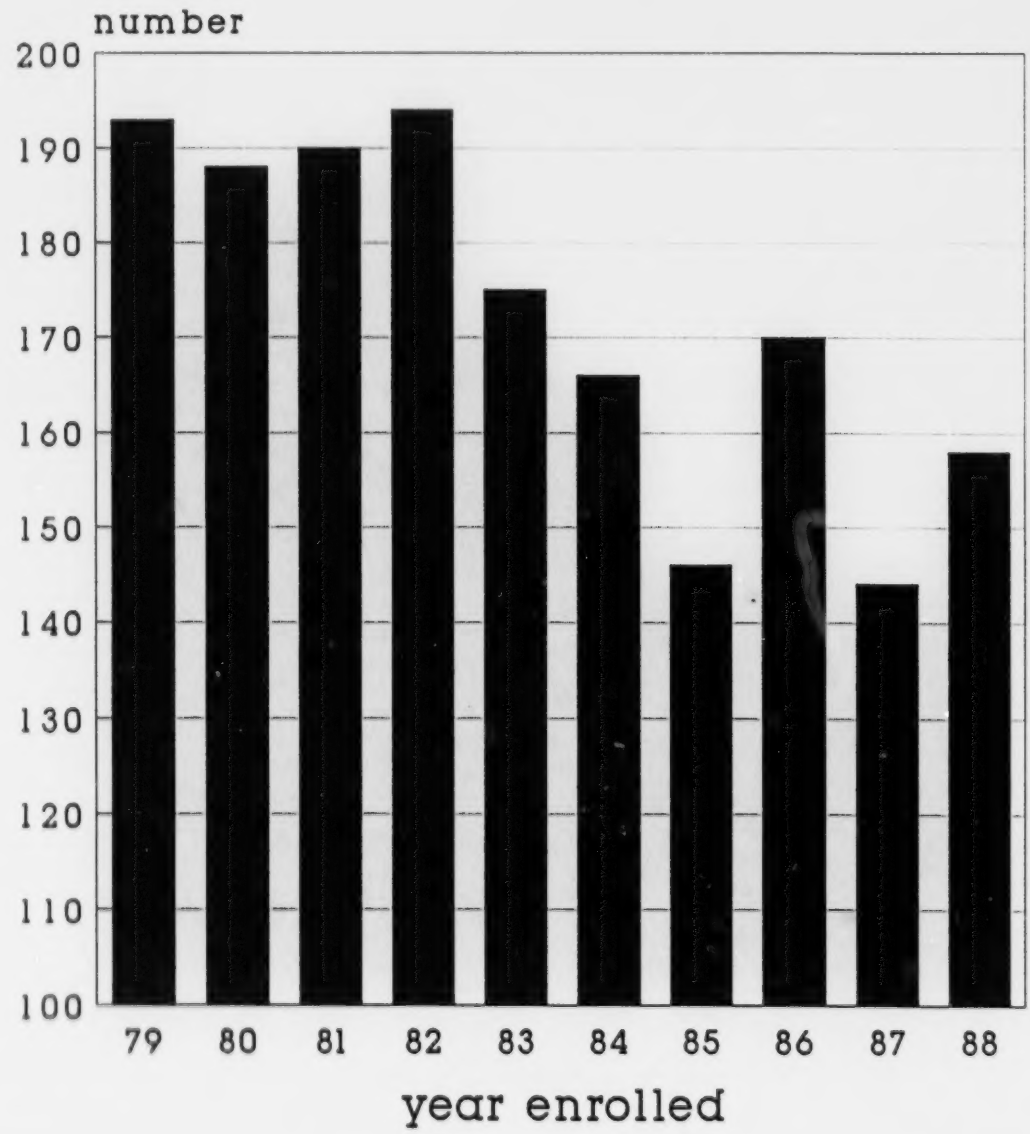


Figure 2
Transferred vs. Matriculated

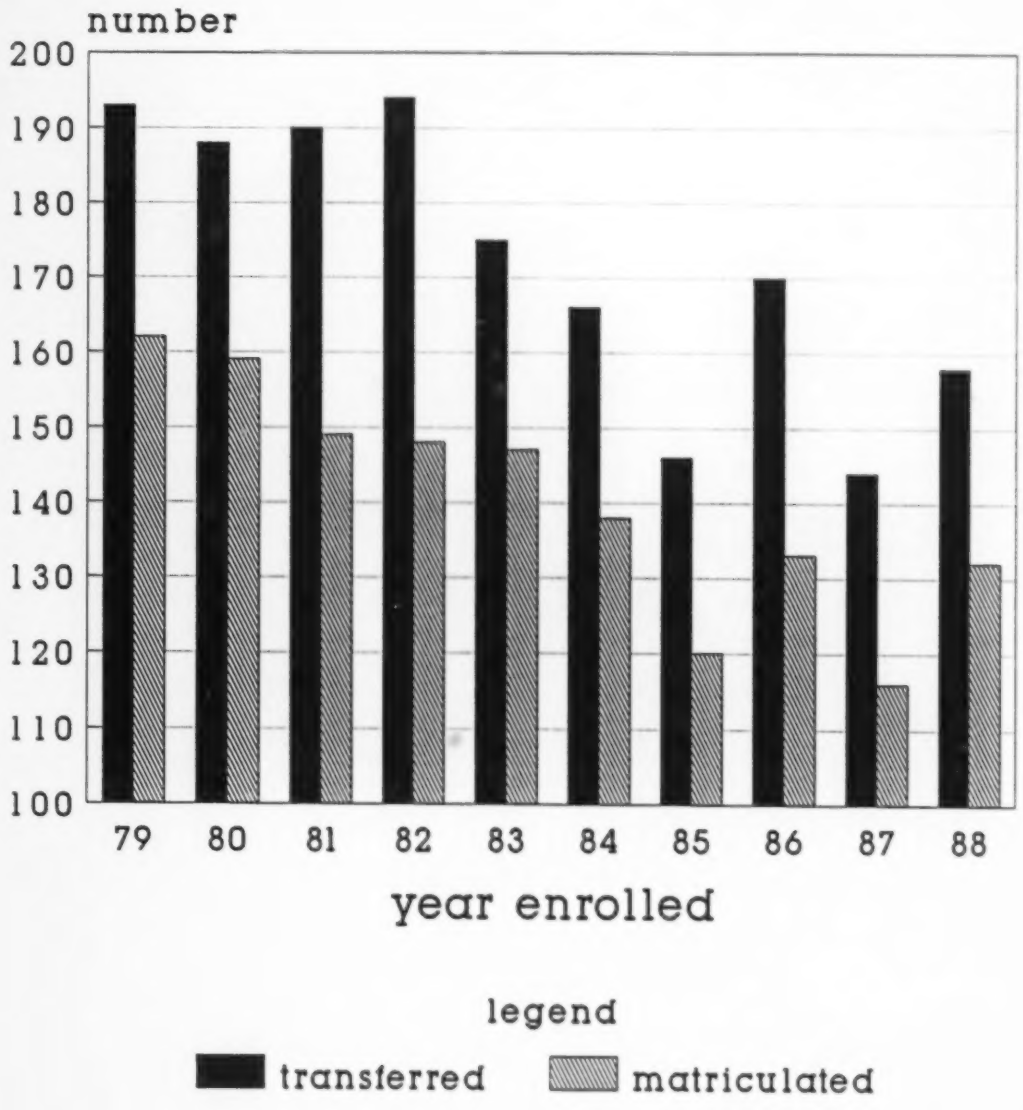


Figure 3
Number of Graduates 79-88

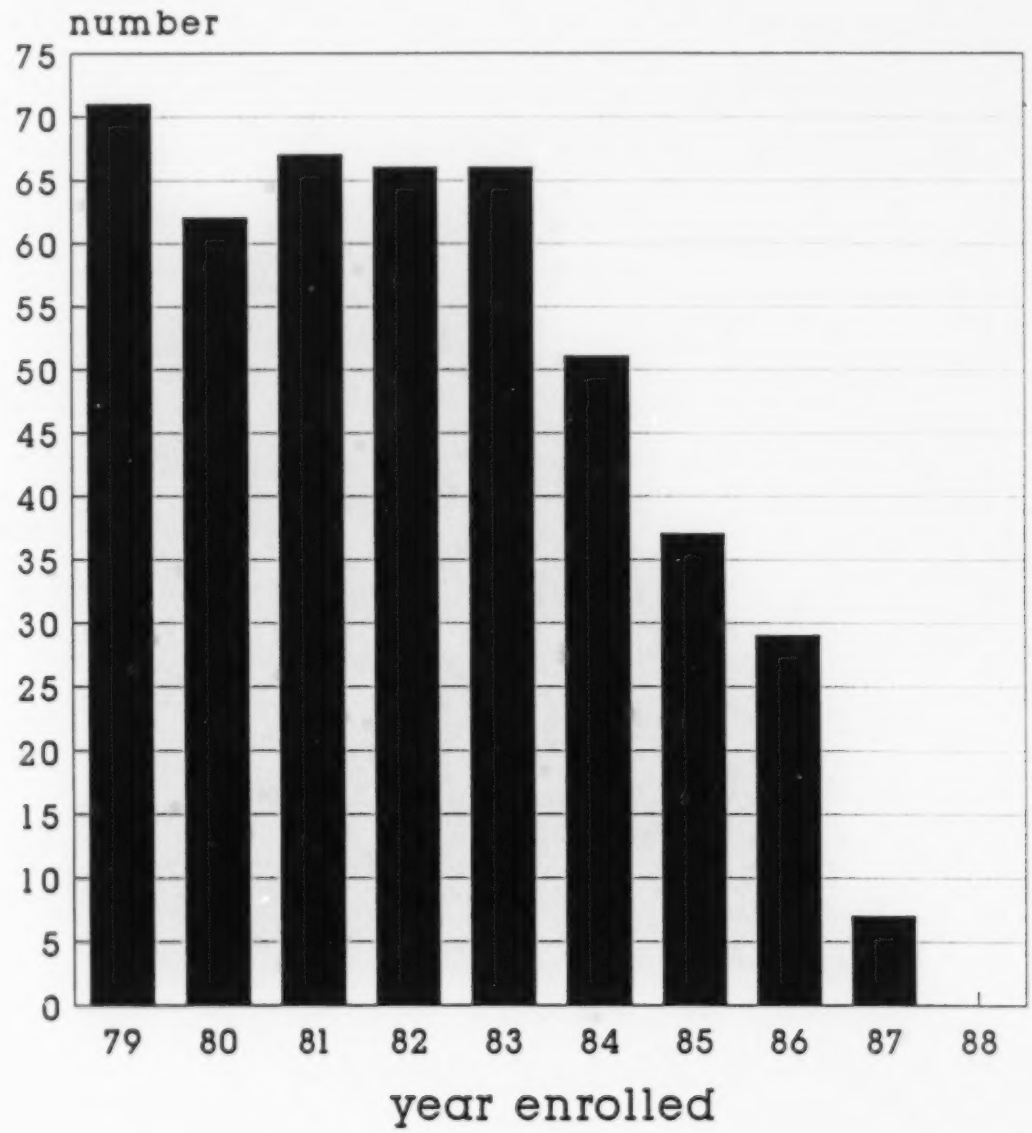
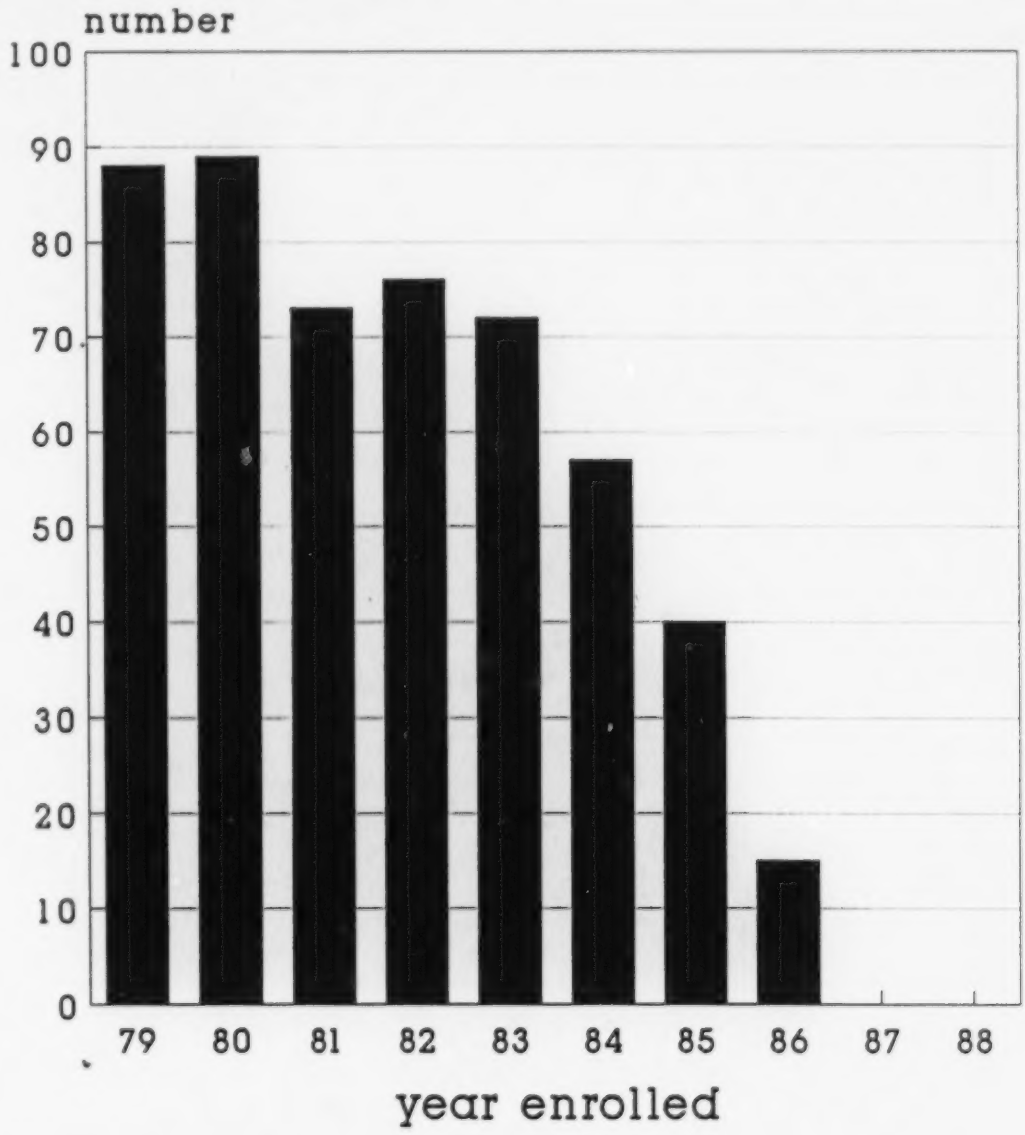


Figure 4
Attrition* of CCC Students



*not enrolled during last 5 semesters

Figure 5
Transfers by Race and Sex

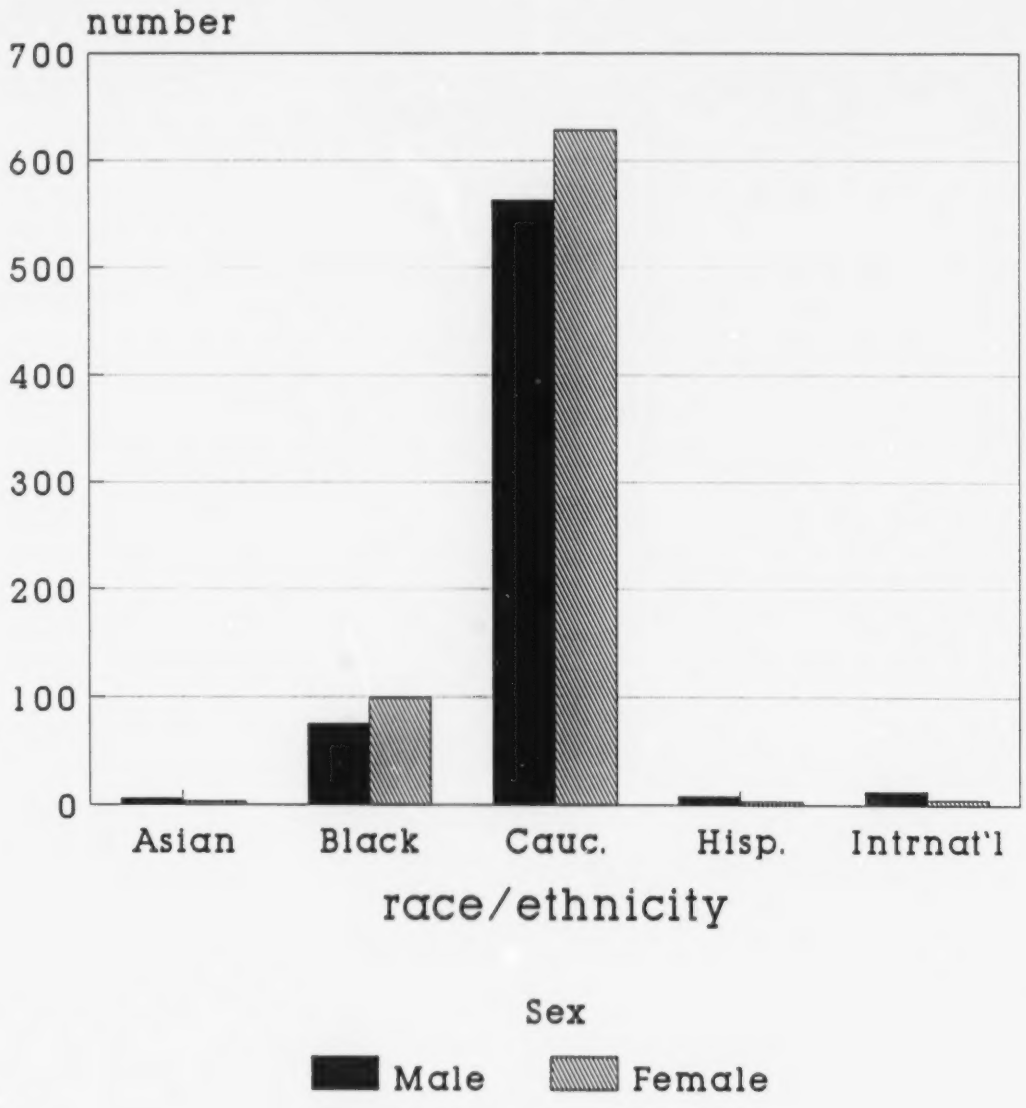


Figure 6
GPA For Graduates

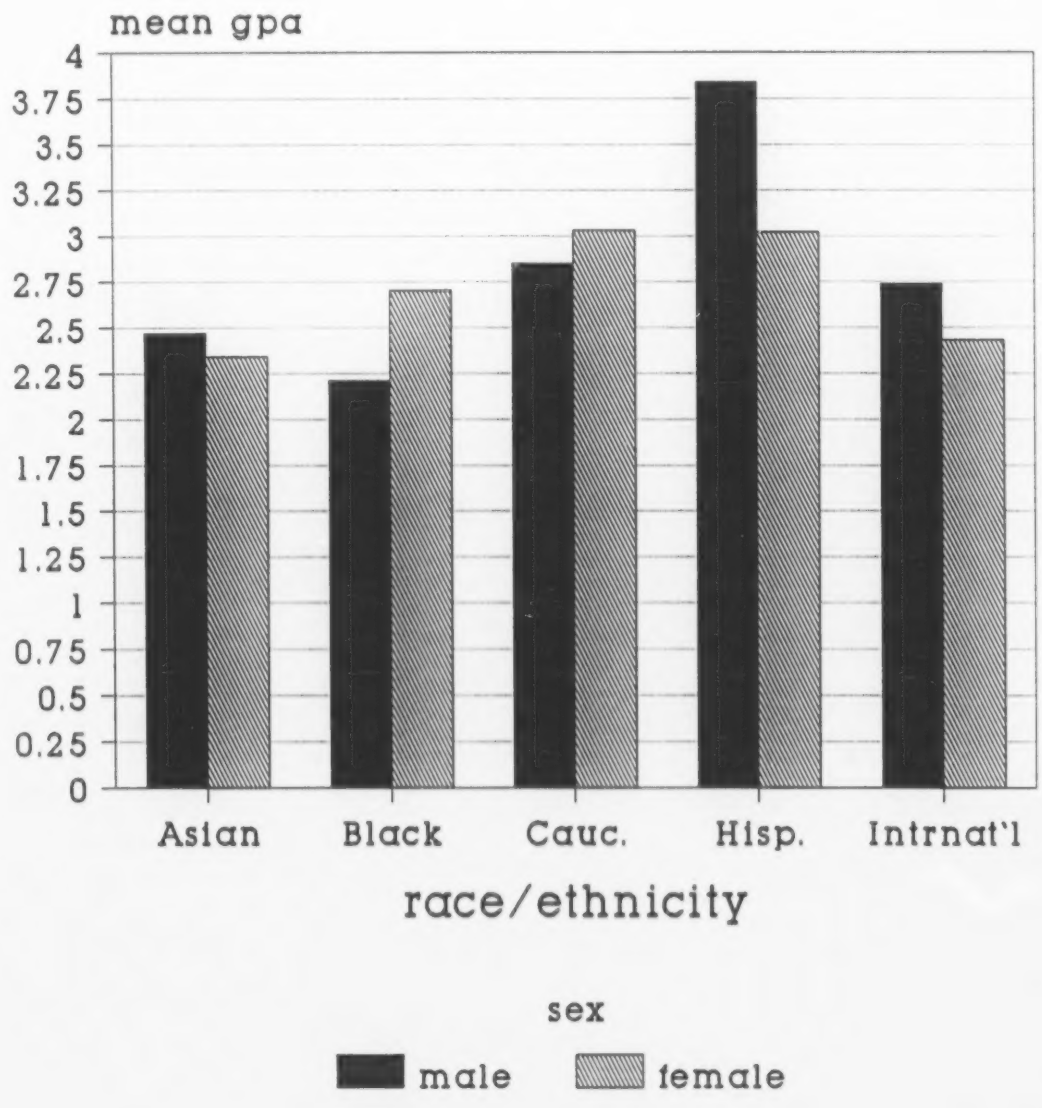
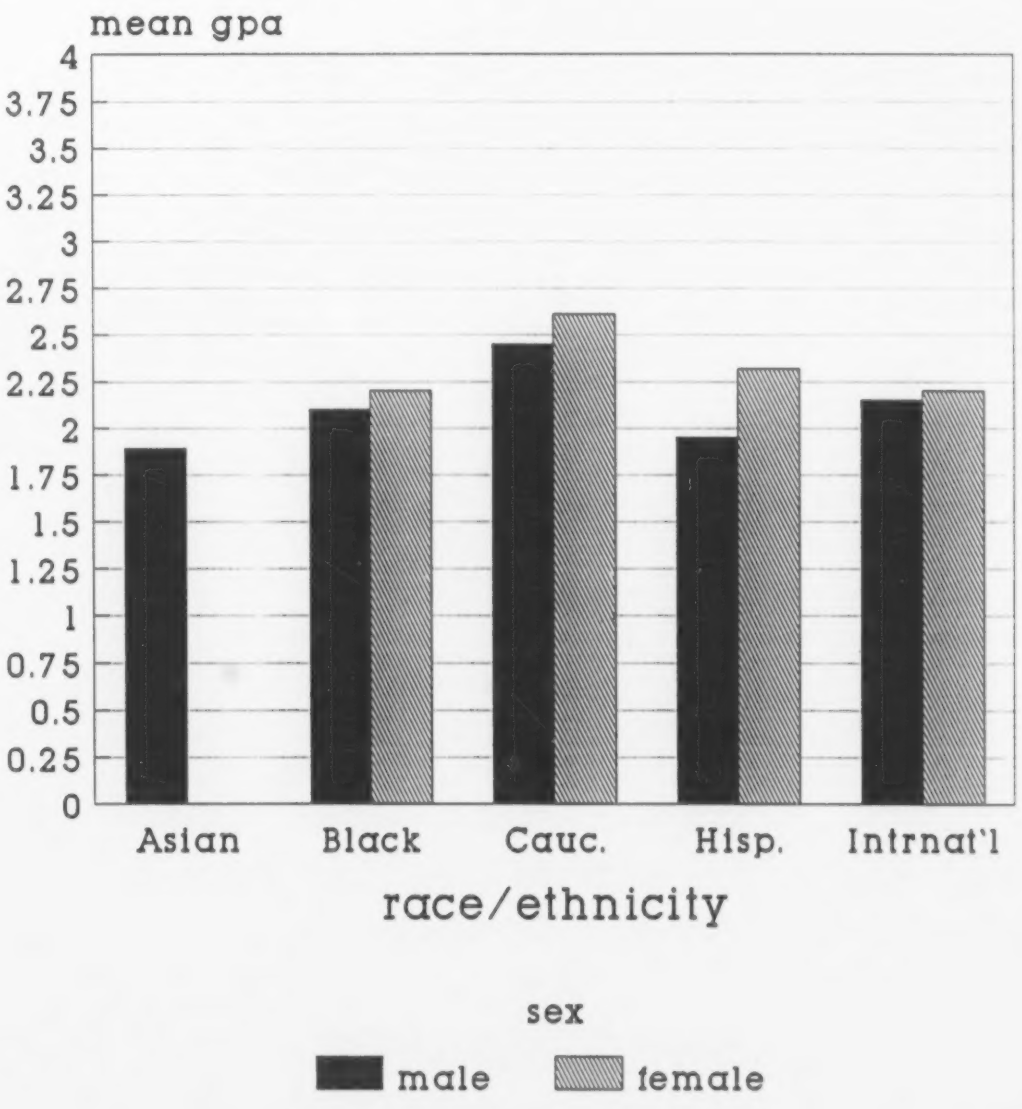
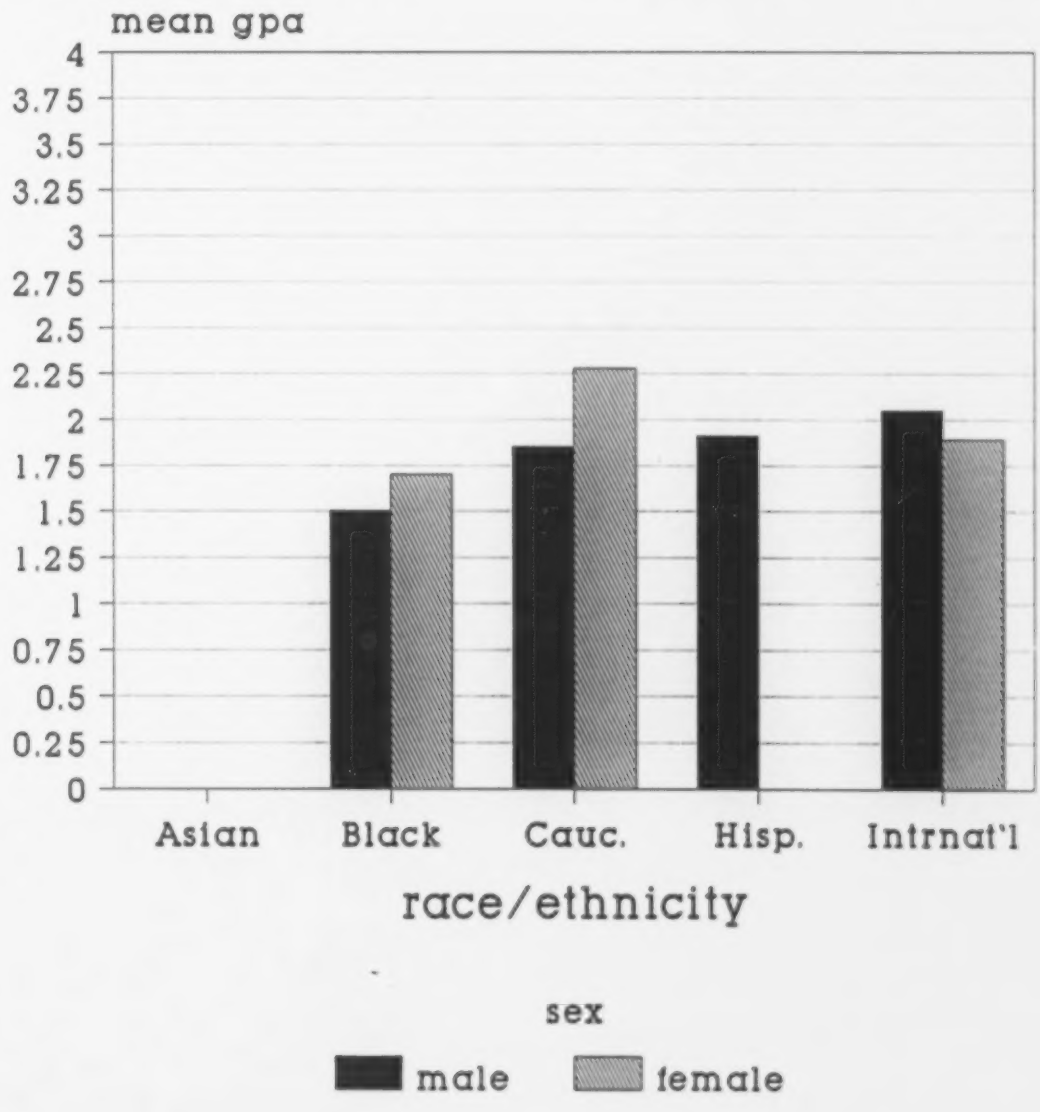


Figure 7
GPA For Currently Enrolled*



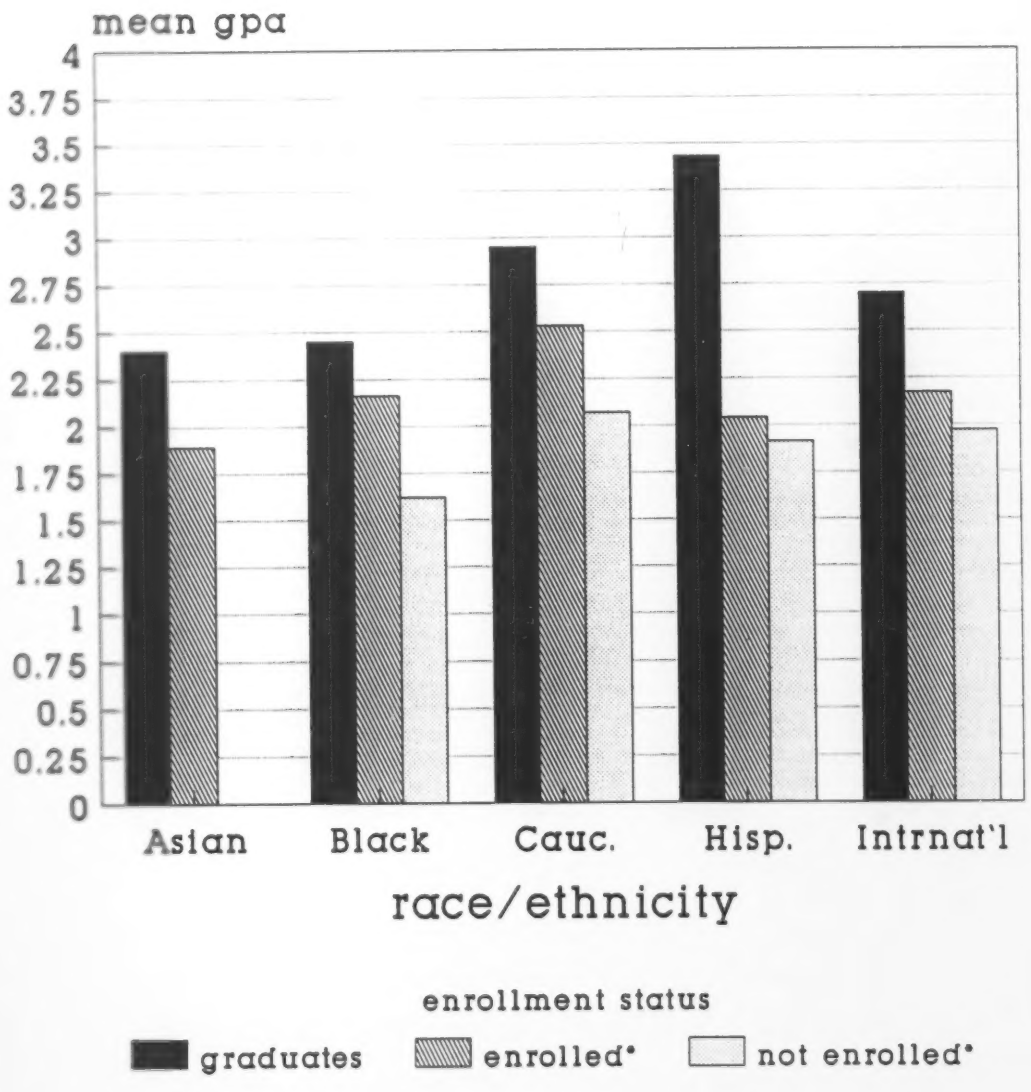
* enrolled during last 5 semesters

Figure 8
GPA For Not Enrolled*



* not enrolled during last 5 semesters

Figure 9
GPA for All Students



based on last 5 semesters

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